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(54) **SYSTEM AND METHOD FOR WIRELESS
DEVICE PAIRING**

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(58) **Field of Classification Search**

None

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

6,772,331	B1	8/2004	Hind et al.
6,845,097	B2	1/2005	Hailer et al.
7,865,140	B2	1/2011	Levien et al.
7,907,901	B1	3/2011	Kahn et al.
7,925,022	B2	4/2011	Jung et al.
7,941,665	B2	5/2011	Berkema et al.
8,059,573	B2	11/2011	Julian et al.
8,095,071	B2	1/2012	Sim et al.
8,103,247	B2	1/2012	Ananthanarayanan et al.
8,190,651	B2	5/2012	Treu et al.
8,213,613	B2	7/2012	Diehl et al.
8,260,261	B2	9/2012	Teague

(Continued)

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(57) **ABSTRACT**

Embodiments of the present invention include a system and method for wirelessly identifying and validating an electronic device in order to initiate a communication process with another device or a service. In an embodiment, the system includes a portable biometric monitoring device that is identified by a client device or a server for the purpose of initiating a pairing process. In an embodiment, pairing implies pairing the portable device to an online user account with minimal user interaction. After pairing, the portable device and appropriate client devices and servers communicate with little or no user interaction, for example to upload sensor data collected by the portable device.

22 Claims, 14 Drawing Sheets

